

—The first experiments of Herr Otto Lilienthal in flying were made with a single cloth-covered, wing-shaped framework, which, after a run from the top of a hill, supported him in the air for perhaps a quarter of a mile as he gently slid down the slope. He has since made it easier to keep his equilibrium by using two smaller frameworks, placed one above the other. This apparatus can be kept in position in a wind of twenty miles an hour, and with a total wing surface of eighteen square meters he has sailed in a nearly horizontal direction against a wind of fifteen miles or more without the run at the start, even being lifted by the stronger winds higher than the starting point, and sometimes coming to a standstill in the air. Such experiences convince him of the possibility of sailing in a circle. As the apparatus would shoot rapidly toward the ground on coming into the wind, it must have sufficient height to complete the turn before landing, and the flapping of small wings may help to gain this.